

An Interesting New Species of *Emphoropsis* from California (Hymenoptera, Anthophoridae) ¹

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While collecting insects at Walker Pass, California, on September 26, 1957, Dr. E. I. Schlinger discovered a small cluster of bees in late afternoon but could capture only two as they dispersed. This bee proved to be a beautiful species of *Emphoropsis*, remarkable for the color pattern on the abdomen and for some of the male characters such as the swollen scape of the antennae and the swollen legs. Our other species fly in the spring and early summer instead of the fall.

Emphoropsis excellens n. sp.

Female.—Black, the apical joint of tarsi brown, the tibial spurs testaceous. Pubescence fulvous yellow becoming paler on the face and changing to white on cheeks and underside of thorax and abdomen. Hair on dorsum of thorax short, dense, erect and almost concealing the surface; that on face rather dense, becoming much longer on occiput, the ocellar region and on the outer margin of the mandibles, but the vertex with a nude area between ocelli and eyes. Abdomen above with fulvous yellow pubescence, becoming bright fulvous as well as longer and denser across the disk of tergite 5, and long and erect on basal half of tergite 1 but otherwise appressed; base of tergites 2 to 4 almost nude and appearing black, with the black area gradually expanding outward on each side and with a narrowly triangular extension in middle almost to the apical margin of the segments, and the yellow-haired area at apex with a broadly rounded submedian lobe on each side. Hair of legs whitish at base, very short on the coxae, middle and hind femora, but long on posterior side of front femora and more fulvous in tibiae and tarsi, with hair on inner side of middle and hind basitarsi bright

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orange fulvous. Antennae black. Tegulae dark. Wings grayish dusky, the nervures blackish.

Head broader than long. Mandibles stout, curved, obtuse at apex and with a small inner tooth. Proboscis moderate in length. Venation normal for *Emphoropsis*, with the first recurrent nervure received near apex of second submarginal cell. Disk of wing beyond venation rather densely papillate. Pygidium much longer than wide and narrowed to apex with the disk convex from side to side. Head and thorax with fine dense punctures, those of clypeus very dense, but the nude area on each side of vertex shining and inpunctate. Abdomen slightly dullish and microscopically rugulose. Disk of pygidium with dense minute striae in transversely arcuate rows. Antennae moderately short, the first joint of flagellum about three times longer than thick at apex and nearly as long as the next three joints together. Length, about 14 mm, anterior wing, 11 mm.

Male.—Black, with a large mark on mandibles, face below level of antennae and scape of antennae broadly beneath pale yellow. Clypeus with an oblique dark spot on each side above; supraclypeal mark concave below, and almost rectangular above; lateral face marks extending on orbits at first broadly, then narrowly, almost to level of anterior ocellus. Antennae otherwise black. Legs black, the four apical joints of tarsi, underside of hind basitarsi and nearly the basal half of claws ferruginous. Pubescence ochraceous, less dense than in female, the face below antennae nearly bare and hair on middle of mesoscutum thin, with the surface well exposed, but hair on cheeks very dense, long and white. Basal half of tergite 2 nearly bare and black, with a quadrate extension in middle almost to the apical margin; following segments similar but the black basal area not much exposed on tergites 4 to 6; apex of tergites with a band of long, appressed, whitish hair, somewhat dilated on each side of the nearly complete median interruption, but only feebly lobate in comparison with the pattern of the female. Tergite 7 with dense ochraceous hair on each side of a rather narrow median bare area. Venter with long white hair. Hair of legs whitish, very long on posterior side of front femora and middle tibiae, and

dense and fulvous on outer side of hind basitarsi. Wings as in the female.

Head somewhat broader than long, the eyes large, with inner orbits diverging above middle of face. Mandibles rather small, with a small obtuse inner tooth. Labrum large, about twice as broad as long, and very convex but with a large flat median area. Clypeus large, evenly convex, with dorsal margin evenly rounded from close to the inner base of mandibles across the summit. Scape of antennae greatly swollen, hardly more than twice as long as thick, with the pedicel concealed in the apex; flagellum stout, the joints about as long as thick, flattened above and crenulate on outer margin, with the first joint a little longer than the second. All the femora and middle and hind tibiae of legs much swollen, but the hind tibiae contracted at apex; middle basitarsi foveate on posterior margin at base and with a rather long conical spur on posterior side of apex; small joints of middle tarsi bluntly spurred behind, with a comb of long stiff hairs on posterior margin of the spurs. Hind basitarsi broadly and thickly dilated on apical half of inner margin, with the dilation ferruginous and somewhat bilobed. Claws of middle and hind tarsi very large, with a short tooth at middle of inner margin. Bare area of tergite 7 slightly bilobed at apex. Seventh and eighth ventral segments and genitalia similar to same parts in our other species; eighth segment with apical plate much broader than long and only slightly rounded across the apex; apical process beneath parameral lobes (gonostyli) of genitalia broad and rounded on a little more than basal half of inner margin and produced into a short fingerlike lobe on outer margin (in other species quadrate or broadly oval in shape); parameral lobes slender at base, somewhat dilated on apical half and thinly hairy. Length, 13 mm; anterior wing, 11 mm.

One female and one male (holotype female and allotype), Walker Pass, Kern Co., CALIFORNIA, September 26, 1957 (E. I. Schlinger), in collection of the Citrus Experiment Station, Riverside.